

*To → Karin - you will find this interesting!*

*Permanent markers are required  
per S. Davis's letter. Since CECOS  
now owns/operates shall we make them  
do this??* *O/b*

Research and Development Department  
P.O. Box 579, Niagara Falls, N. Y.  
August 4, 1972

MEMORANDUM

*CECOS*

TO: Mr. A. H. Soeder  
COPY: R. & D. File  
FROM: H. J. O'Hear (3)  
SUBJECT: Survey of Radioactive Waste Burial Plot

The radioactive waste burial plot located in the Union Carbide Refuse Property was monitored for radiation on August 2, 1972.

The plot was first monitored along parallel lines at 10' intervals, and then laid out in approximately 10' x 15' grids and the survey repeated with readings at the corners of each grid tabulated.

The measurements were taken on a Model 111B "Scintillator" (AEC No. SBX - 11A) manufactured by Precision Radiation Instruments, Inc. and which has a sensitivity of better than 0.005 MR/HR.

Immediately prior to the survey the instruments operation and calibration were checked against a 0.1 MR Scintillator Calibration Disc (Geophysical Instrument and Supply Company - 11/5/71).

The readings are noted on the accompanying sketch and are the actual meter readings uncorrected for background. A background measurement is also noted.

*H. J. O'Hear*

H. J. O'Hear, R.S.O.

HJO'H:et  
Attach.

RECEIVED

DATE RECEIVED

JAN 14 1981

OCT 30 1972

BUR of ENV RADIATION

NIAGARA COUNTY HEALTH DEPT.  
NIAGARA FALLS, N. Y.

Survey of Radioactive Waste Burial Plot  
Values are Instrument Readings in MR/HR  
Uncorrected for Background

|     |     |      |      |      |      |      |    |
|-----|-----|------|------|------|------|------|----|
| .04 | .01 | .01  | .01  | .025 | .035 | .015 | .0 |
| .01 | .01 | .01  | .015 | .015 | .02  | .015 | .0 |
| .01 | .01 | .01  | .01  | .015 | .02  | .015 | .0 |
| .01 | .01 | .01  | .01  | .015 | .02  | .015 | .0 |
| .02 | .01 | .02  | .05  | .04  | .03  | .02  | .0 |
| .01 | .01 | .015 | .02  | .025 | .035 | .02  | .0 |

ackground

←--- 50' ---→

.01 MR/HR

Roadway



UNION CARBIDE CORPORATION  
MINING AND METALS DIVISION

P. O. BOX 66, 137 - 47th STREET, NIAGARA FALLS, NEW YORK 14302

*John M...*

RECEIVED  
AUG 1 1972

J. J. REYNOLDS

August 1, 1972

FILE  
"NIAGARA  
PLANT -  
REAL  
ESTATE"  
offensive  
materials  
file

Mr. Herbert Heimerl  
Statler Hilton Hotel  
Delaware Avenue  
Buffalo, New York

Dear Herb,

Attached is the information I think you will need to file in  
Niagara County Clerk's office. If you need more, please  
let me know.

Very truly yours,

*A. H. Soeder*

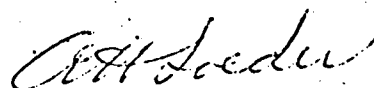
A. H. Soeder/W  
Attachments

CC: Messrs. R. A. Casciani  
F. Early  
W. J. O'Brien  
H. F. Reichard  
R. D. Simmons

During the period August 1965 to April 1972 505 tons of slag containing 9,212 pounds of natural Thorium Oxide and 1,293 pounds of natural Uranium Oxide were buried in Lots number 9 and 13, Parcel 17 in the Town of Niagara.

The slag is buried with four feet of cover. The burial site location is shown on Union Carbide's Drawing ENS 716, the original is on file at Union Carbide, Mining and Metals Division plant at 137 - 47th Street. The location is also outlined by steel posts containing signs stating, "Danger Radioactive Material Buried four feet below."

The burial dates are shown on the attached sheet.



A.H. Soeder/W  
August 1, 1972



OLLIS S. INGRAHAM, M.D.  
COMMISSIONER

STATE OF NEW YORK  
DEPARTMENT OF HEALTH

DIVISION OF SANITARY ENGINEERING

845 CENTRAL AVENUE  
ALBANY, N.Y. 12206

July 24, 1972

MEREDITH H. THOMPSON, D. ENG.  
ASSISTANT COMMISSIONER

BUREAU OF RADIOLOGICAL HEALTH  
SHERWOOD DAVIES, M.P.H., P.E.  
DIRECTOR

Mr. A. H. Soeder  
Union Carbide Corporation  
Mining and Metals Division  
P. O. Box 66  
137-47th Street  
Niagara Falls, New York 14302

Dear Mr. Soeder:

This is in reply to your letter of May 31, 1972, regarding the proposed sale of property which includes approximately 10,400 square feet used as a radioactive waste burial plot pursuant to an exemption to the provisions of Section 16.8 of Part 16 of the New York State Sanitary Code.

The following additional information is needed to complete our review of your request:

- 1 - A description of the instrumentation used for the survey made by Mr. O'Hear. The description should include the sensitivity of the detector and information on calibration of the instrument.
- 2 - The actual survey results including instrument readings and where they were taken.
- 3 - A description of the burial site including boundaries and location of permanent markers required by the exemption.
- 4 - Indication of compliance with the requirements of paragraph 2 of Page 2 of the exemption letter dated May 28, 1965 which requires the filing of a statement with the Niagara County Clerk.

We will review this additional information and advise you

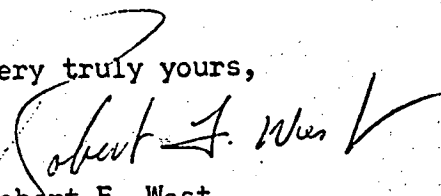
Mr. Soeder

-2-

July 24, 1972

as to any restrictions that may be placed on the use of this site  
in the future.

Very truly yours,

  
Robert F. West  
Associate Radiological  
Health Specialist

RFW:eds

June 14, 1972

Mr. Cashman - Bureau of Environmental Pollution Control - Att: Mr. Kelleher  
Mr. Davies - Bureau of Radiological Health  
Union Carbide Corporation

Attached is a copy of a letter dated May 31, 1972, Mr. Mr. A.H. Soeder, Union Carbide Corporation of Niagara Falls, advising that it is their intention to sell property which contains a burial plot in which radioactive materials were buried under a license issued by the State Labor Department and an exemption granted from Part 16 of the State Sanitary Code, 1966. There is also attached a survey made by Mr. O'Hear and a listing of the amounts of material buried. There is also a large map that has been provided which I am unable to reproduce. Essentially, Union Carbide advises us that they intend to sell the burial plot. I would appreciate your comments as soon as possible so that I can advise Mr. Soeder.

SD:lrp

Attachment

cc: Mr. Violanti - Buffalo Regional Office  
Mr. Gideon - Niagara County Health Dept.  
File  
Chrono



UNION CARBIDE CORPORATION

MINING AND METALS DIVISION

P. O. BOX 66, 137-47TH STREET, NIAGARA FALLS, NEW YORK 14302

May 31, 1972

RECEIVED

JUN 1 1972

BUR. OF RAD. HEALTH

Mr. Sherwood Davies, P.E.  
Director, Bureau of Radiological Health Services  
State of New York, Department of Health  
84 Holland Avenue  
Albany, New York 12208

Dear Mr. Davies:

In 1966 we received a license to process radioactive slag in our production of ferro-columbium. The license No. 950-0139 was issued by the State Labor Department. We also received an exemption to the provisions of Section 16.8 of Part 16 of the State Sanitary Code from the State Health Department.

It is now our intention to sell the property which contains the burial plot. This location is shown on our attached drawing No. ENS 716. The entire plot is approximately 37.2 acres and the burial site is 10,400 sq. ft. It is well marked and posted with radiation signs.

In accordance with Section 16.10 Paragraph B we have had a survey of the area made by our Radiation Safety Officer, Mr. Hugh O'Hear, and a copy is attached. He could not detect any radiation above background. At the time of the survey he checked the entire refuse property as well as the burial site. The slag is buried with 4 ft. of cover. Also attached is a listing showing the amounts of slag and radioactive material buried.

The property in question is to be used as a sanitary land fill and would be sold with a stipulation that the burial area should not be disturbed.

We are also sending copies of this letter and attachments to the prospective purchaser and the local County Health Officer. If you desire further information, please advise.

Very truly yours,

A.H. Soeder/W

Messrs. E. Gedeon, Niagara County Health Officer  
F. Williams, Niagara Recycling Inc.



Union Carbide Corporation-Mining & Metals Division  
Niagara Falls, New York - May 31, 1972

The following amounts of slag were buried on our refuse properly according to our New York State Radioactive Materials License No. 950-0139. The burial site is located on our property as shown in drawing ENS 716.

| <u>Date</u>   | <u>Tons Slag</u> | <u># Radioactive Material</u> |
|---------------|------------------|-------------------------------|
| August 1965   | 250              | 1250 $U_3O_8$<br>1125 $ThO_2$ |
| December 1966 | 31               | 1247 $ThO_2$                  |
| August 1967   | 29               | 1107 $ThO_2$                  |
| November 1967 | 61               | 1977 $ThO_2$                  |
| April 1968    | 48               | 1942 $ThO_2$                  |
| June 1968     | 43               | 1814 $ThO_2$                  |
| July 1971     | 35               | 35 $U_3O_8$                   |
| April 1972    | <u>8</u>         | <u>8</u> $U_3O_8$             |
|               | 505              | 9212 $ThO_2$<br>1293 $U_3O_8$ |

A.H. Soeder/W

INTERNAL CORRESPONDENCE

MINING AND METALS DIVISION

P. O. BOX 579, NIAGARA FALLS, NEW YORK 14302

Mr. A. H. Soeder

Date February 25, 1972

Building No. 2  
Niagara Falls, N.Y. 14302

Originating Dept. Research and Development Department

Answering letter date

Mr. H. F. Wendt  
R & D File

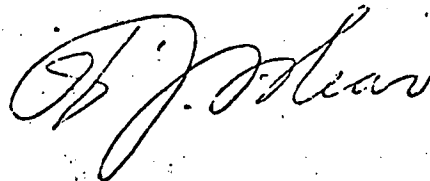
Subject Radiological Survey of the  
Refuse Property

The refuse property of Union Carbide Corporation, located in the area between Pine Avenue in Niagara Falls and Military and Packard Roads in the Town of Niagara, has been monitored for radiation.

No radiation above background was observed during the survey, with the exception of some radioactive slag which showed a slight amount of radiation but which is scheduled to be buried in the designated radiation area when weather permits.

H. J. O'Hear, R.S.O.

H.J.O.:dg



DATE RECEIVED

JUN 1 1972

NIAGARA COUNTY HEALTH DEPT.  
LOCKPORT N. Y.



**UNION CARBIDE CORPORATION**

~~CHEMICALS AND PLASTICS~~ Mining and Metals Div.

P. O. BOX 66, 137-47TH STREET, NIAGARA FALLS, NEW YORK 14302

April 29, 1968

Mr. W. Friedman  
Asst. Commissioner for Environmental Health  
Niagara County Department of Health  
525 Bewley Building  
Lockport, New York

Dear Mr. Friedman:

During the week of April 29, 1968, we propose to dispose of 96,000 pounds of thorium bearing slag containing 1,942 pounds of  $\text{ThO}_2$ . This slag will be buried in compliance with our letter of April 8, 1965, and under provisions of the State Department of Health, Mr. Sherwood Davies' letter on exemption burial dated October 26, 1966.

The area will be posted and monitored as previously outlined. The slag will be buried in the plot as shown on our drawing as previously submitted. If further information is desired, please advise.

Very truly yours,

*Paul J. Sitzenstatter*  
Operating Supervisor - Specials 02

P. J. Sitzenstatter:ob

cc: Mr. J. A. Meele



HOLLIS S. INGRAHAM, M.D.  
COMMISSIONER

STATE OF NEW YORK  
DEPARTMENT OF HEALTH

84 HOLLAND AVENUE  
ALBANY, NEW YORK 12203

May 28, 1965

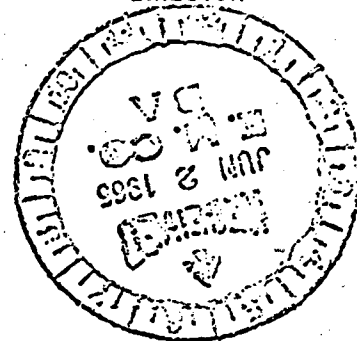
DIVISION OF  
ENVIRONMENTAL HEALTH SERVICES

MEREDITH H. THOMPSON, D. ENG.  
ASSISTANT COMMISSIONER

BUREAU OF  
RADIOLOGICAL HEALTH SERVICES

SHERWOOD DAVIES, D.C.E., M.P.H.

DIRECTOR



Mr. A. M. Soeder  
Superintendent, Operations  
Union Carbide Corporation  
P. O. Box 596  
137-47 Street  
Niagara Falls, New York

Reference: Exemption Burial

Dear Mr. Soeder:

We have carefully reviewed your letter of request, dated April 8, 1965, together with a submittal entitled, "Answers to Health Department Checklist Questions" as they relate to the burial of slag material containing uranium oxide ( $U_3O_8$ ) and thorium oxide ( $ThO_2$ ). According to this information, you propose to immediately bury approximately 1250 pounds of uranium oxide contained in 250 tons of slag. A second burial is proposed to be made of slag containing approximately 625 pounds of thorium oxide in 50,000 pounds of slag. In the future, it is proposed to bury 100,000 pounds per month of slag containing about 1250 pounds of thorium oxide. The site of the burial grounds covers an area of 540 feet by 1500 feet, located just North of Pine Avenue Boulevard, between Packard Road and 64th Street in the city of Niagara Falls, Niagara County, New York.

An exemption to the provisions of Section 16.8 of Part 16 of the State Sanitary Code, is hereby granted with respect to the total quantity of radioactive material that may be buried at any one time, in any one location and with respect to the frequency of burials. This exemption is granted on the condition that Union Carbide inform the Niagara County Department of Health of certain information including the amount of radioactive materials, the location of burial, and the content of radioactivity in the materials. Further, permanent markers shall be established locating the boundaries of the burial site.

If it becomes the intent of the company to sell the property on which the site is located, it will be necessary to meet the

May 28, 1965

requirements of Section 16.10, paragraph B. This section requires that a survey be made before the property is turned over to the new owner. A copy of the report of the survey shall be provided this Department, the local health officer having jurisdiction and the subsequent tenant.

Prior to negotiation of a contract for sale, lease or other transfer of any parcel of property designated as a disposal area and exempted from the provision of Section 16.8 of the Sanitary Code of the State of New York (10 NYCRR 16.8), the Corporation shall file in the office of the clerk of the County of Niagara in the Book of Covenants, Restrictions, Trusts and Forms, a form stating the period during which burials of radioactive waste have occurred together with the total amount of each radioisotope buried as waste.

Based upon this Department's findings, this burial operation can safely be maintained without causing an undue health hazard.

Very truly yours,

*Sherwood Davies*  
2/8

Sherwood Davies, P.E.  
Director, Bureau of  
Radiological Health Services